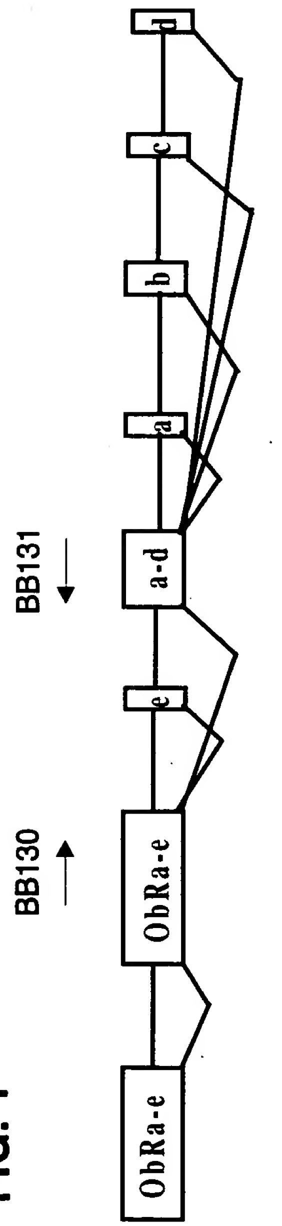


FIG. 1

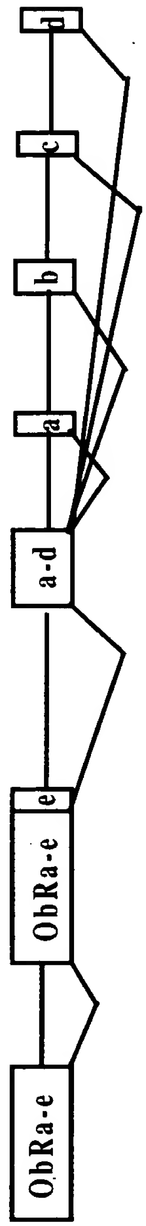


FIG. 2A

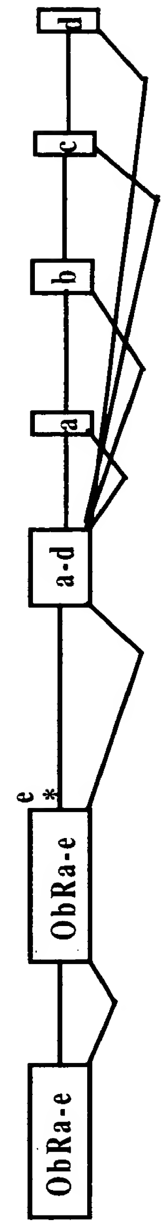


FIG. 2B

FIG. 3A

Sequence across the mouse intron-exon border:

aatgttaaaaagtttcacatccac**ggtatgtgtactgtacttttcatggattag**
N V K K F H I H **G M C T V L F M D ***

Sequence across the human intron-exon border:

tctgttaagaagtattatatccat**ggtaagtttactatactttag**
S V K K Y Y I H **G K F T I L ***

FIG. 3B

Mouse Ob-Re: **ggtatgtgtactgtacttttcatggat**
Human Ob-Re: **ggtaagtttactatactt**

Mouse Ob-Re: **G M C T V L F M D**
Human Ob-Re: **G K F T I L**

FIG. 4A

```
   1  ATGATTTGTCAAAAATTCTGTGTGGTTTTGTTACATTGGGAATTTATTTATGTGATAACT   60
  61  GCGTTTAACTTGTCATATCCAATTACTCCTTGGAGATTTAAGTTGTCTTGCATGCCACCA  120
 121  AATTCAACCTATGACTACTTCCTTTTGCCTGCTGGACTCTCAAAGAATACTTCAAATTCG  180
 181  AATGGACATTATGAGACAGCTGTTGAACCTAAGTTTAATTCAAGTGGTACTCACTTTTCT  240
 241  AACTTATCCAAAACAACTTTCCACTGTTGCTTTCGGAGTGAGCAAGATAGAAACTGCTCC  300
 301  TTATGTGCAGACAACATTGAAGGAAAGACATTTGTTTCAACAGTAAATTCTTTAGTTTTT  360
 361  CAACAAATAGATGCAAACTGGAACATACAGTGCTGGCTAAAAGGAGACTTAAAATTATTC  420
 421  ATCTGTTATGTGGAGTCATTATTTAAGAATCTATTCAGGAATTATAACTATAAGGTCCAT  480
 481  CTTTTATATGTTCTGCCTGAAGTGTTAGAAGATTCACCTCTGGTTCCCCAAAAAGGCAGT  540
 541  TTTCAGATGGTTCACTGCAATTGCAGTGTTCATGAATGTTGTGAATGTCTTGTGCCTGTG  600
 601  CCAACAGCCAAACTCAACGACACTCTCCTTATGTGTTTGAAAATCACATCTGGTGGAGTA  660
 661  ATTTTCCAGTCACCTCTAATGTCAGTTCAGCCCATAAATATGGTGAAGCCTGATCCACCA  720
 721  TTAGGTTTGCATATGGAAATCACAGATGATGGTAATTTAAAGATTTCTTGGTCCAGCCCA  780
 781  CCATTGGTACCATTTCCACTTCAATATCAAGTGAAATATTCAGAGAATTCTACAACAGTT  840
 841  ATCAGAGAAGCTGACAAGATTGTCTCAGCTACATCCCTGCTAGTAGACAGTATACTTCCT  900
 901  GGGTCTTCGTATGAGGTTCAGGTGAGGGGCAAGAGACTGGATGGCCCAGGAATCTGGAGT  960
 961  GACTGGAGTACTCCTCGTGTCTTTACCACACAAGATGTCATATACTTTCCACCTAAAATT 1020
1021  CTGACAAGTGTTGGGTCTAATGTTTCTTTTCACTGCATCTATAAGAAGGAAAACAAGATT 1080
1081  GTTCCCTCAAAAGAGATTGTTTGGTGGATGAATTTAGCTGAGAAAATTCCTCAAAGCCAG 1140
1141  TATGATGTTGTGAGTGATCATGTTAGCAAAGTTACTTTTTTCAATCTGAATGAAACCAAA 1200
1201  CCTCGAGGAAAGTTTACCTATGATGCAGTGTACTGCTGCAATGAACATGAATGCCATCAT 1260
```

FIG. 4B

```
1261  CGCTATGCTGAATTATATGTGATTGATGTCAATATCAATATCTCATGTGAAACTGATGGG  1320
1321  TACTTAACTAAAATGACTTGCAGATGGTCAACCAGTACAATCCAGTCACTTGCGGAAAGC  1380
1381  ACTTTGCAATTGAGGTATCATAGGAGCAGCCTTTACTGTTCTGATATTCCATCTATTCAT  1440
1441  CCCATATCTGAGCCCAAAGATTGCTATTTGCAGAGTGATGGTTTTTATGAATGCATTTTC  1500
1501  CAGCCAATCTTCCTATTATCTGGCTACACAATGTGGATTAGGATCAATCACTCTCTAGGT  1560
1561  TCACTTGACTCTCCACCAACATGTGTCCTTCCTGATTCTGTGGTGAAGCCACTGCCTCCA  1620
1621  TCCAGTGTGAAAGCAGAAATTACTATAAACATTGGATTATTGAAAATATCTTGGGAAAAG  1680
1681  CCAGTCTTTCCAGAGAATAACCTTCAATTCCAGATTCGCTATGGTTTAAGTGGAAAAGAA  1740
1741  GTACAATGGAAGATGTATGAGGTTTATGATGCAAAATCAAAATCTGTCAGTCTCCCAGTT  1800
1801  CCAGACTTGTGTGCAGTCTATGCTGTTCAGGTGCGCTGTAAGAGGCTAGATGGACTGGGA  1860
1861  TATTGGAGTAATTGGAGCAATCCAGCCTACACAGTTGTCATGGATATAAAAGTTCCTATG  1920
1921  AGAGGACCTGAATTTTGGAGAATAATTAATGGAGATACTATGAAAAAGGAGAAAAATGTC  1980
1981  ACTTTACTTTGGAAGCCCCTGATGAAAAATGACTCATTGTGCAGTGTTCAGAGATATGTG  2040
2041  ATAAACCATCATACTTCCTGCAATGGAACATGGTCAGAAGATGTGGGAAATCACACGAAA  2100
2101  TTCACTTTCCTGTGGACAGAGCAAGCACATACTGTTACGGTTCTGGCCATCAATTCAATT  2160
2161  GGTGCTTCTGTTGCAAATTTTAATTTAACCTTTTCATGGCCTATGAGCAAAGTAAATATC  2220
2221  GTGCAGTCACTCAGTGCTTATCCTTTAAACAGCAGTTGTGTGATTGTTTCCTGGATACTA  2280
2281  TCACCCAGTGATTACAAGCTAATGTATTTTATTATTGAGTGGAAAAATCTTAATGAAGAT  2340
2341  GGTGAAATAAAATGGCTTAGAATCTCTTCATCTGTTAAGAAGTATTATATCCATGGTAAG  2400
2401  TTTACTATACTTTAG                                               2415
```

FIG. 5A

1	M	I	C	Q	K	F	C	V	V	L	L	H	W	E	F	I	Y	V	I	T	20
21	A	F	N	L	S	Y	P	I	T	P	W	R	F	K	L	S	C	M	P	P	40
41	N	S	T	Y	D	Y	F	L	L	P	A	G	L	S	K	N	T	S	N	S	60
61	N	G	H	Y	E	T	A	V	E	P	K	F	N	S	S	G	T	H	F	S	80
81	N	L	S	K	T	T	F	H	C	C	F	R	S	E	Q	D	R	N	C	S	100
101	L	C	A	D	N	I	E	G	K	T	F	V	S	T	V	N	S	L	V	F	120
121	Q	Q	I	D	A	N	W	N	I	Q	C	W	L	K	G	D	L	K	L	F	140
141	I	C	Y	V	E	S	L	F	K	N	L	F	R	N	Y	N	Y	K	V	H	160
161	L	L	Y	V	L	P	E	V	L	E	D	S	P	L	V	P	Q	K	G	S	180
181	F	Q	M	V	H	C	N	C	S	V	H	E	C	C	E	C	L	V	P	V	200
201	P	T	A	K	L	N	D	T	L	L	M	C	L	K	I	T	S	G	G	V	220
221	I	F	Q	S	P	L	M	S	V	Q	P	I	N	M	V	K	P	D	P	P	240
241	L	G	L	H	M	E	I	T	D	D	G	N	L	K	I	S	W	S	S	P	260
261	P	L	V	P	F	P	L	Q	Y	Q	V	K	Y	S	E	N	S	T	T	V	280
281	I	R	E	A	D	K	I	V	S	A	T	S	L	L	V	D	S	I	L	P	300
301	G	S	S	Y	E	V	Q	V	R	G	K	R	L	D	G	P	G	I	W	S	320
321	D	W	S	T	P	R	V	F	T	T	Q	D	V	I	Y	F	P	P	K	I	340
341	L	T	S	V	G	S	N	V	S	F	H	C	I	Y	K	K	E	N	K	I	360
361	V	P	S	K	E	I	V	W	W	M	N	L	A	E	K	I	P	Q	S	Q	380
381	Y	D	V	V	S	D	H	V	S	K	V	T	F	F	N	L	N	E	T	K	400
401	P	R	G	K	F	T	Y	D	A	V	Y	C	C	N	E	H	E	C	H	H	420

FIG. 5B

```
421  R Y A E L Y V I D V N I N I S C E T D G  440
441  Y L T K M T C R W S T S T I Q S L A E S  460
461  T L Q L R Y H R S S L Y C S D I P S I H  480
481  P I S E P K D C Y L Q S D G F Y E C I F  500
501  Q P I F L L S G Y T M W I R I N H S L G  520
521  S L D S P P T C V L P D S V V K P L P P  540
541  S S V K A E I T I N I G L L K I S W E K  560
561  P V F P E N N L Q F Q I R Y G L S G K E  580
581  V Q W K M Y E V Y D A K S K S V S L P V  600
601  P D L C A V Y A V Q V R C K R L D G L G  620
621  Y W S N W S N P A Y T V V M D I K V P M  640
641  R G P E F W R I I N G D T M K K E K N V  660
661  T L L W K P L M K N D S L C S V Q R Y V  680
681  I N H H T S C N G T W S E D V G N H T K  700
701  F T F L W T E Q A H T V T V L A I N S I  720
721  G A S V A N F N L T F S W P M S K V N I  740
741  V Q S L S A Y P L N S S C V I V S W I L  760
761  S P S D Y K L M Y F I I E W K N L N E D  780
781  G E I K W L R I S S S V K K Y Y I H G K  800
801  F T I L                                 804
```

FIG. 6A

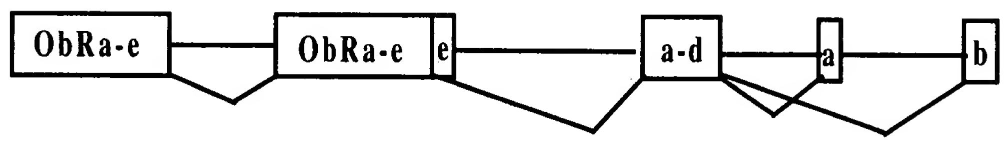


FIG. 6B

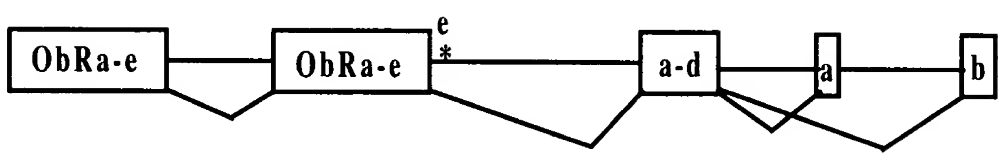


FIG. 7A

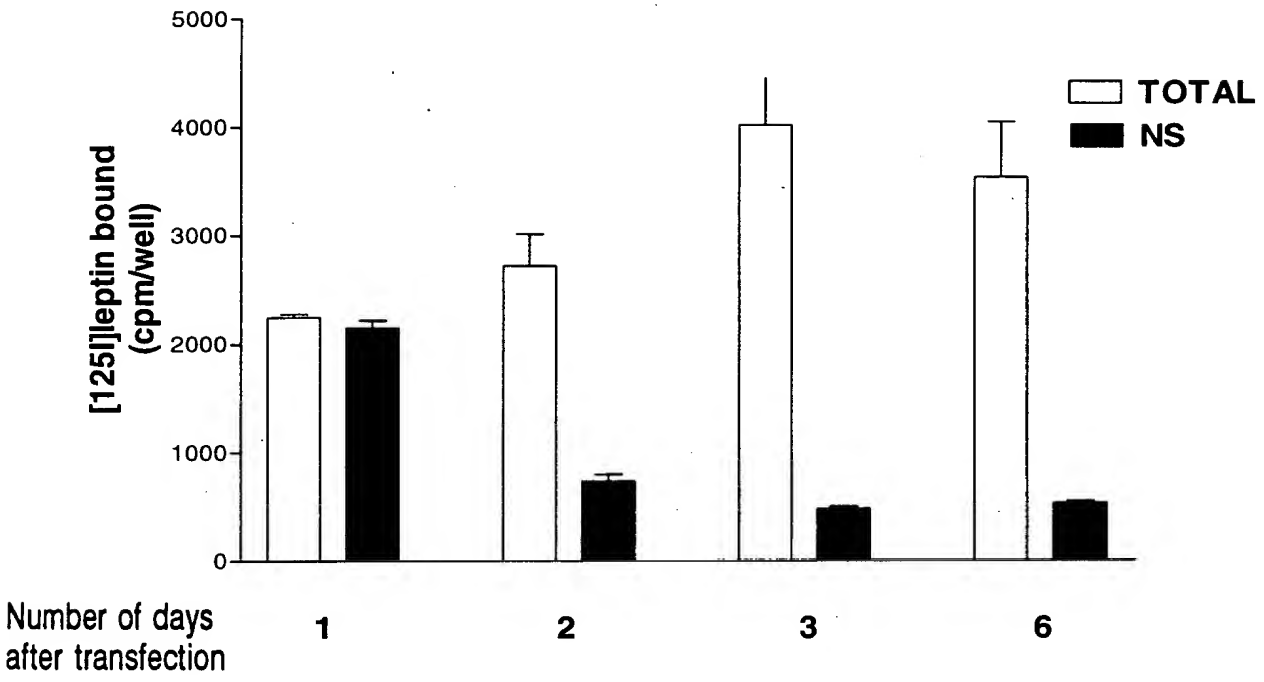


FIG. 7B

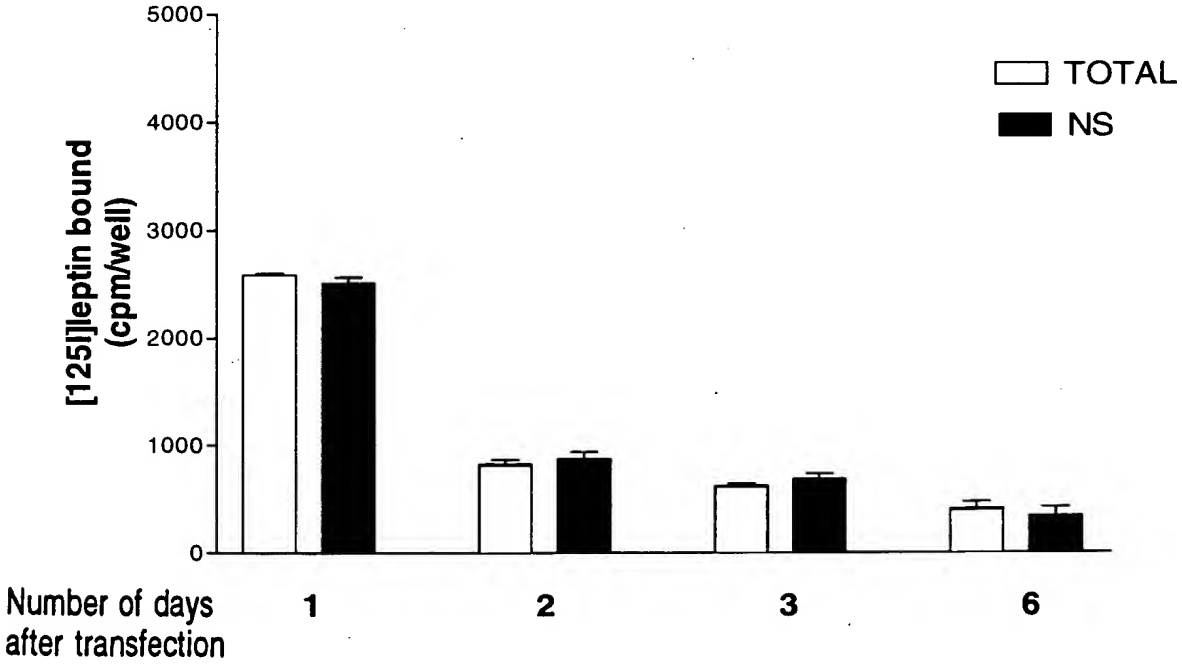


FIG. 7C

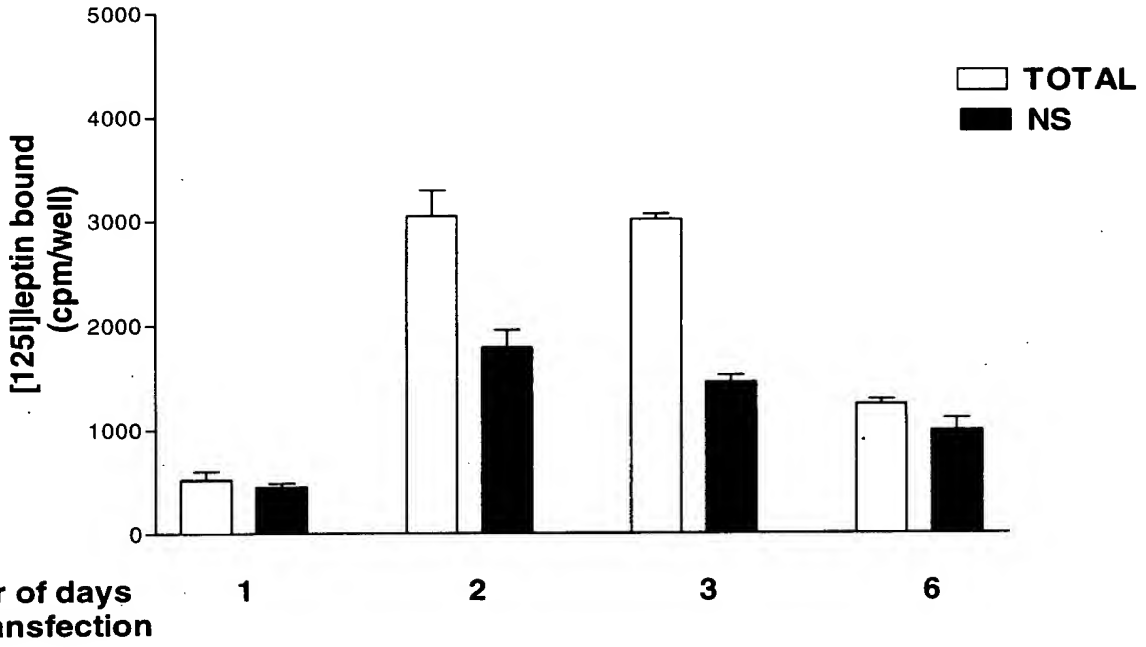
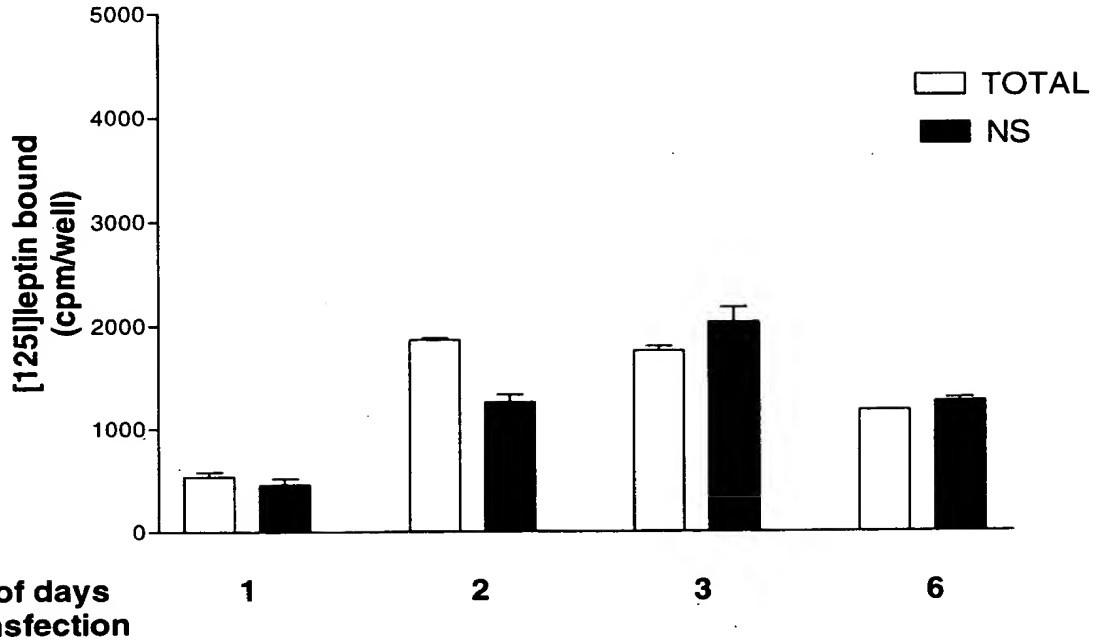


FIG. 7D



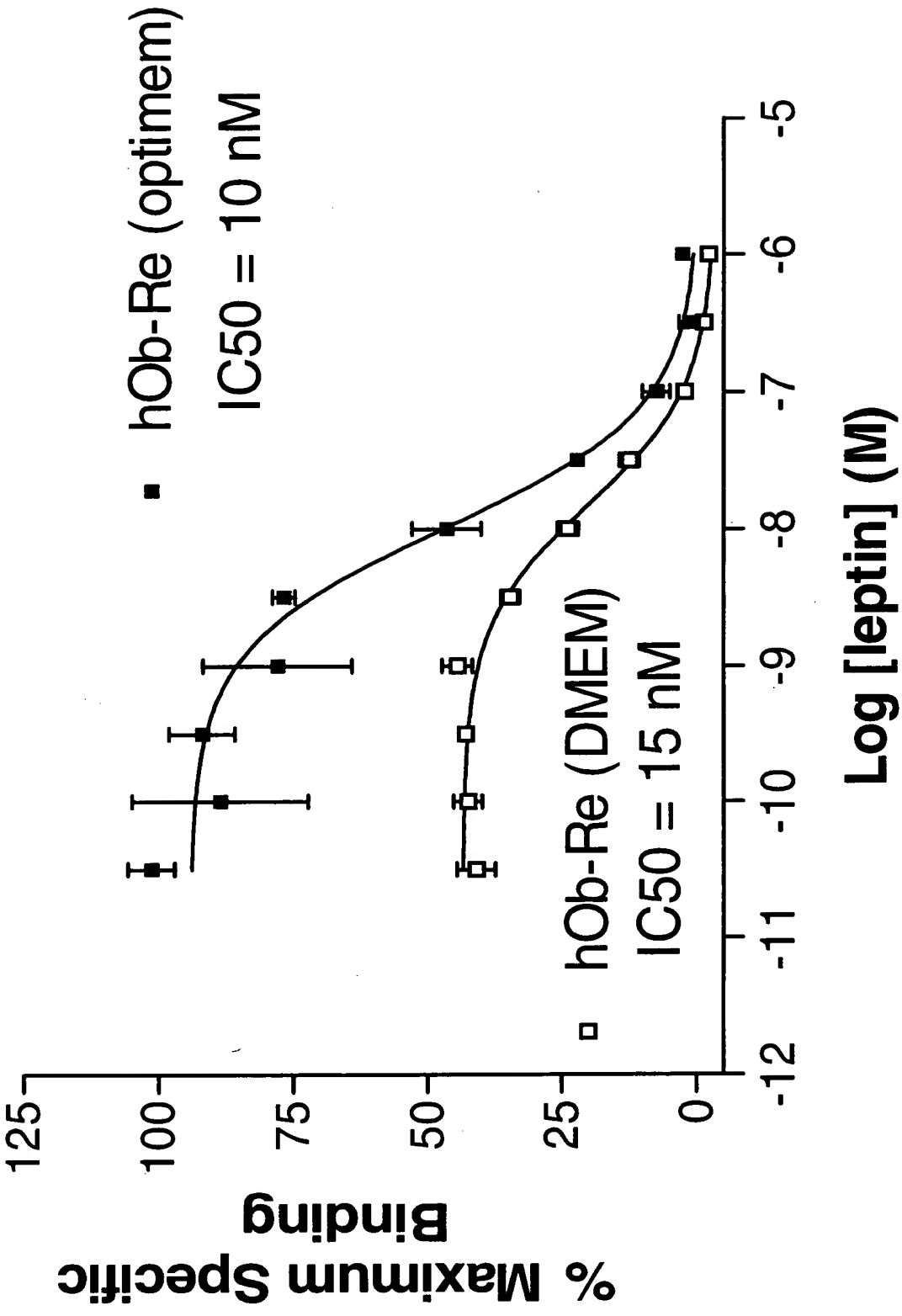


FIG. 8

FIG. 9

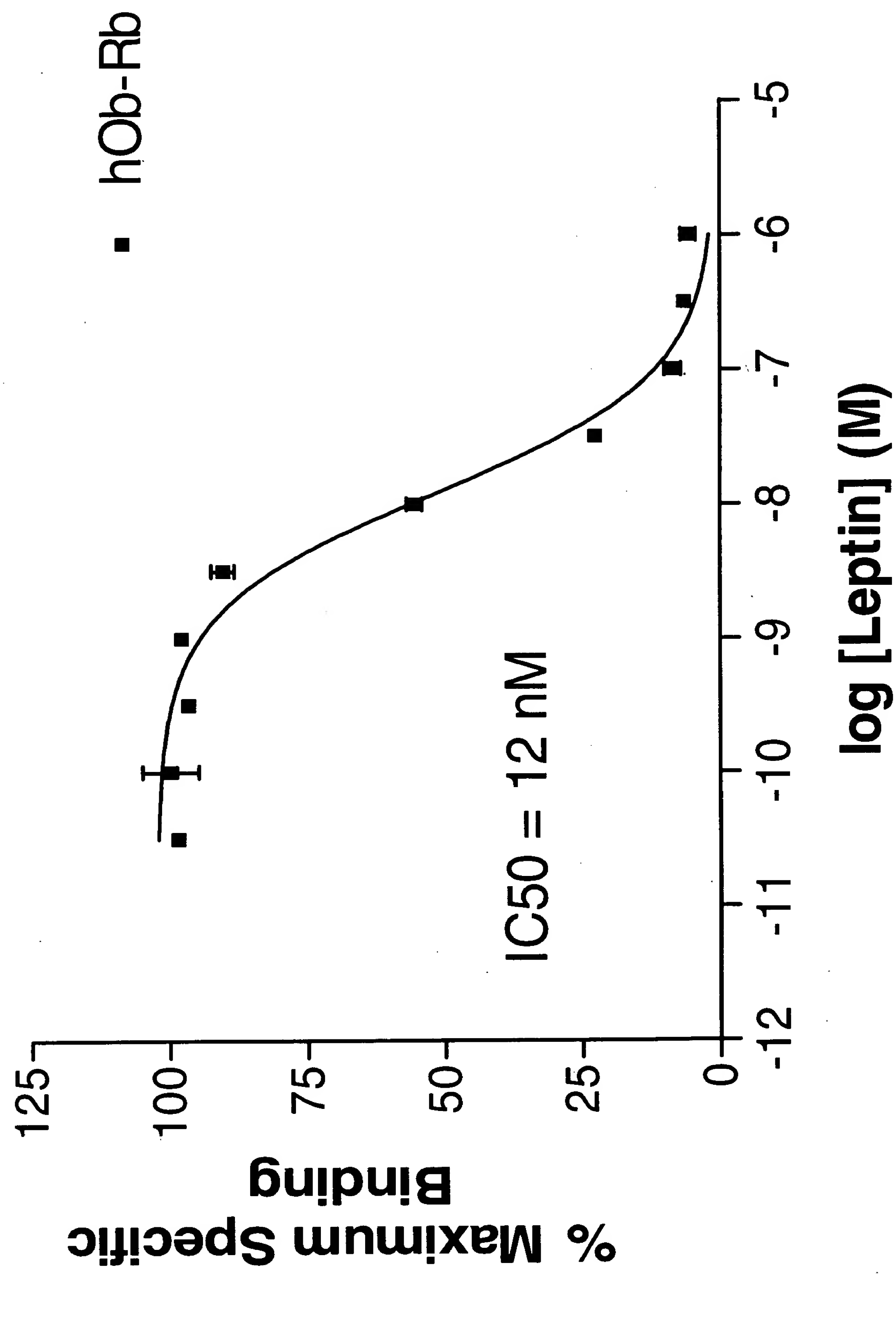


FIG. 10A

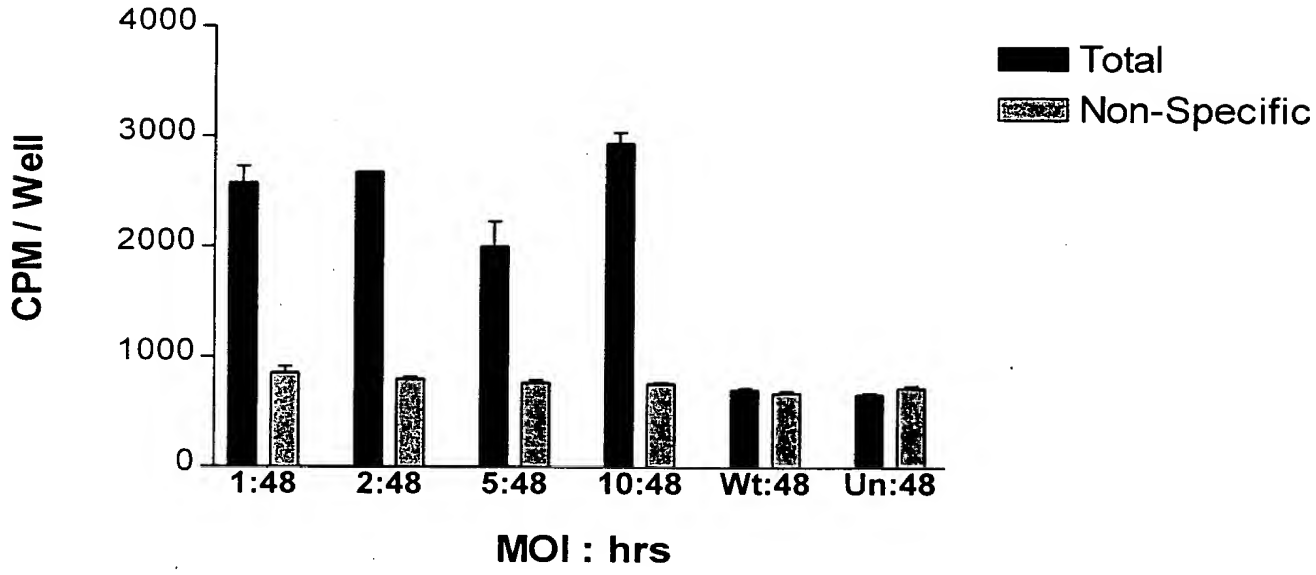


FIG. 10B

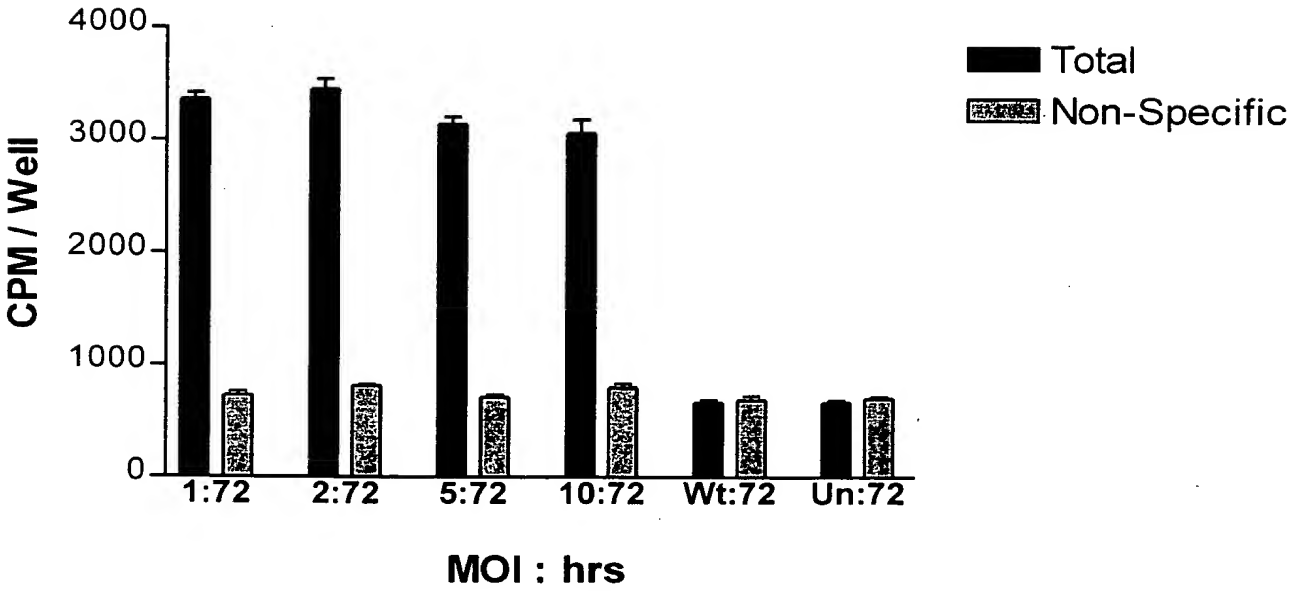


FIG. 10C

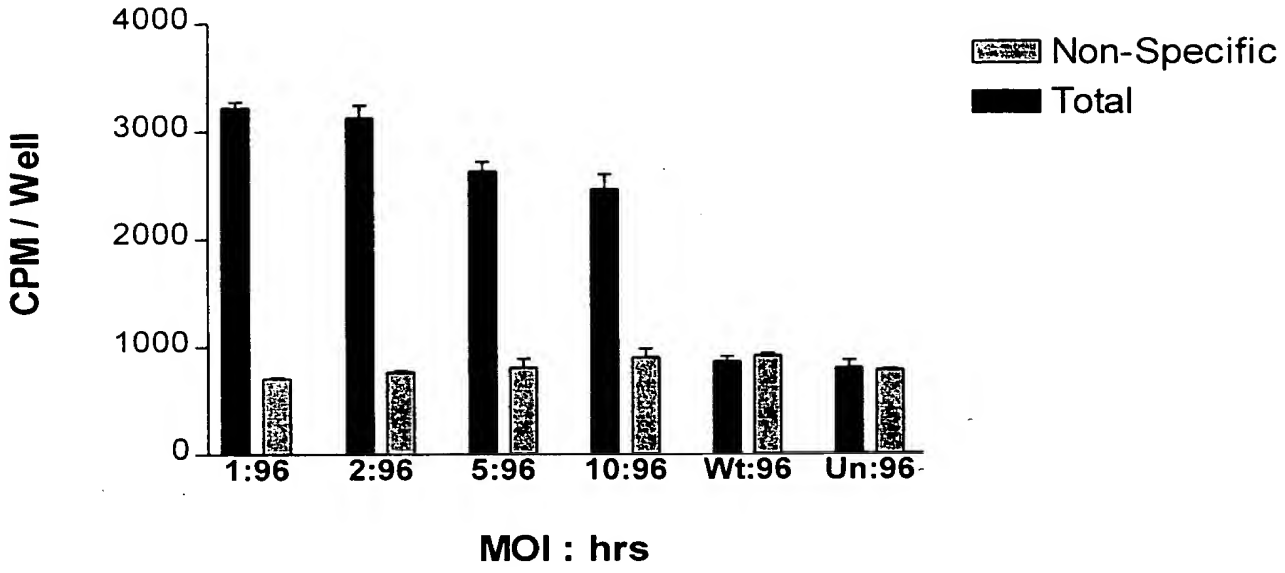


FIG. 10D

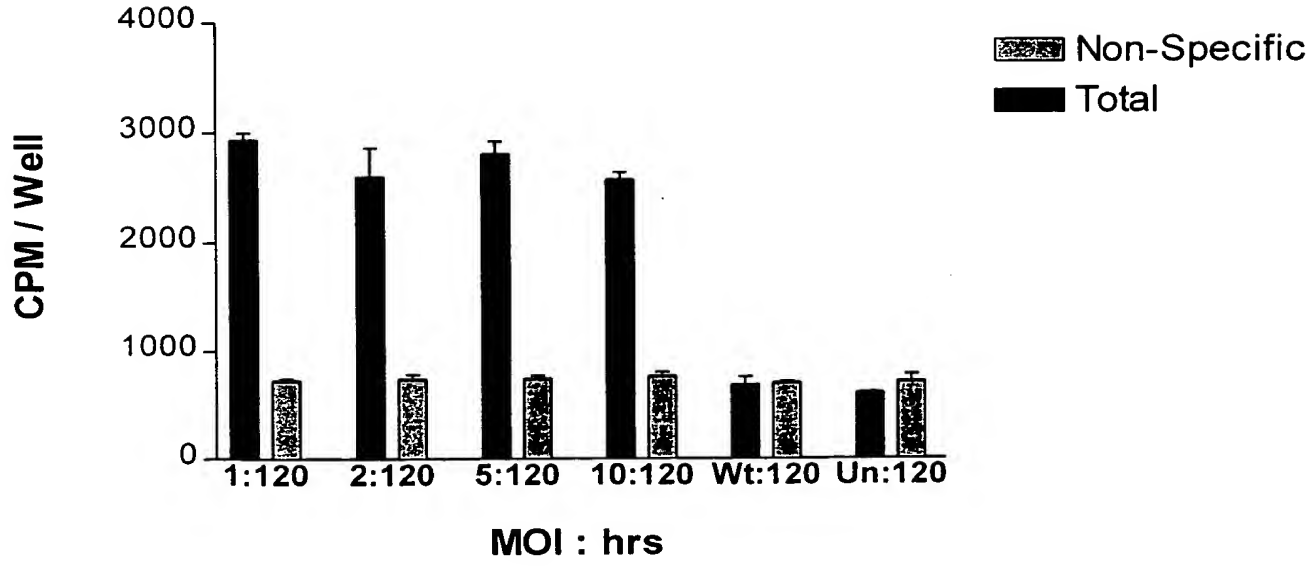


FIG. 11A

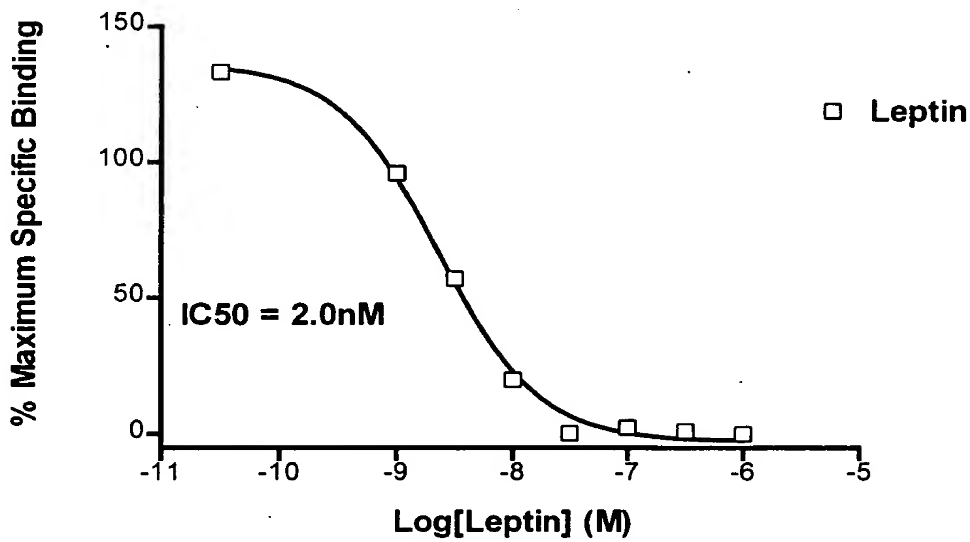


FIG. 11B